

**PROGRAM MANAGER FOR TRAINING SYSTEMS**

# **Implementing the Training M&S Master Plan**

Maj Walt Yates

for

Col Frank Kelley

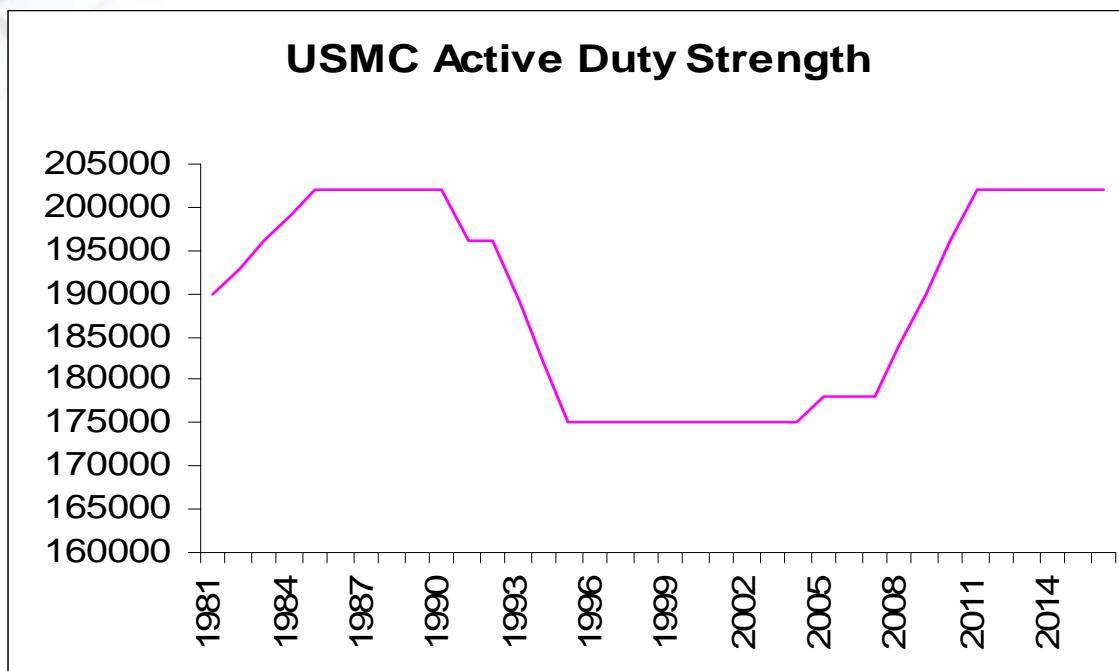
PM Training Systems



<b>Report Documentation Page</b>			Form Approved OMB No. 0704-0188	
<p>Public reporting burden for the collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to a penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.</p>				
1. REPORT DATE <b>11 MAR 2008</b>	2. REPORT TYPE <b>N/A</b>	3. DATES COVERED <b>-</b>		
4. TITLE AND SUBTITLE <b>Implementing the Training M&amp;S Master Plan</b>			5a. CONTRACT NUMBER	
			5b. GRANT NUMBER	
			5c. PROGRAM ELEMENT NUMBER	
6. AUTHOR(S)			5d. PROJECT NUMBER	
			5e. TASK NUMBER	
			5f. WORK UNIT NUMBER	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) <b>US Marine Corps Systems Command</b>			8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)			10. SPONSOR/MONITOR'S ACRONYM(S)	
			11. SPONSOR/MONITOR'S REPORT NUMBER(S)	
12. DISTRIBUTION/AVAILABILITY STATEMENT <b>Approved for public release, distribution unlimited</b>				
13. SUPPLEMENTARY NOTES <b>2008 DoD M&amp;S (Modeling and Simulation) Conference, presentations held in Orlando, Florida on March 10 - 14, 2008, The original document contains color images.</b>				
14. ABSTRACT				
15. SUBJECT TERMS				
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT <b>UU</b>	18. NUMBER OF PAGES <b>13</b>
a. REPORT <b>unclassified</b>	b. ABSTRACT <b>unclassified</b>	c. THIS PAGE <b>unclassified</b>	19a. NAME OF RESPONSIBLE PERSON	

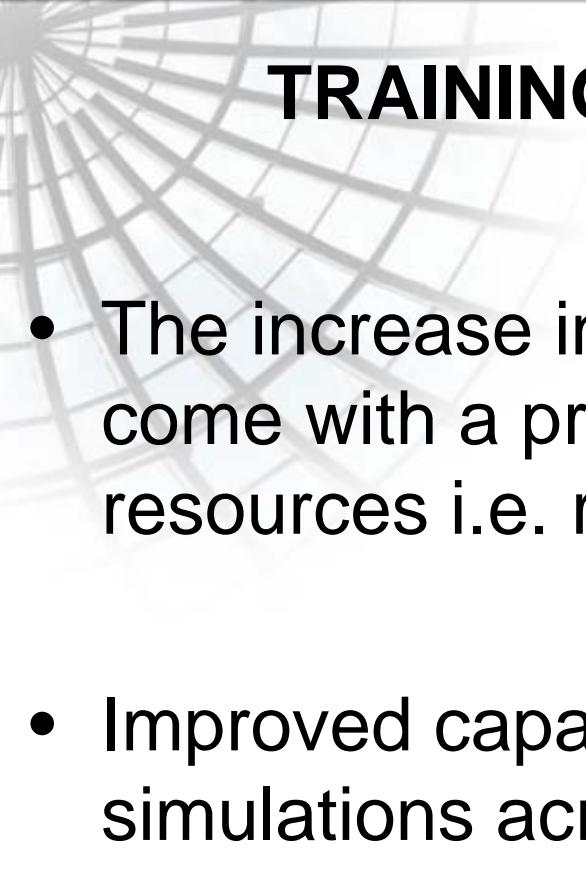
# THE MARINE CORPS IS GROWING

Marine Corps strength will increase to **202,000** in three years time to the same size as when the Berlin Wall came down



***As budgets tighten, how do we ensure that the force is trained to standard?***





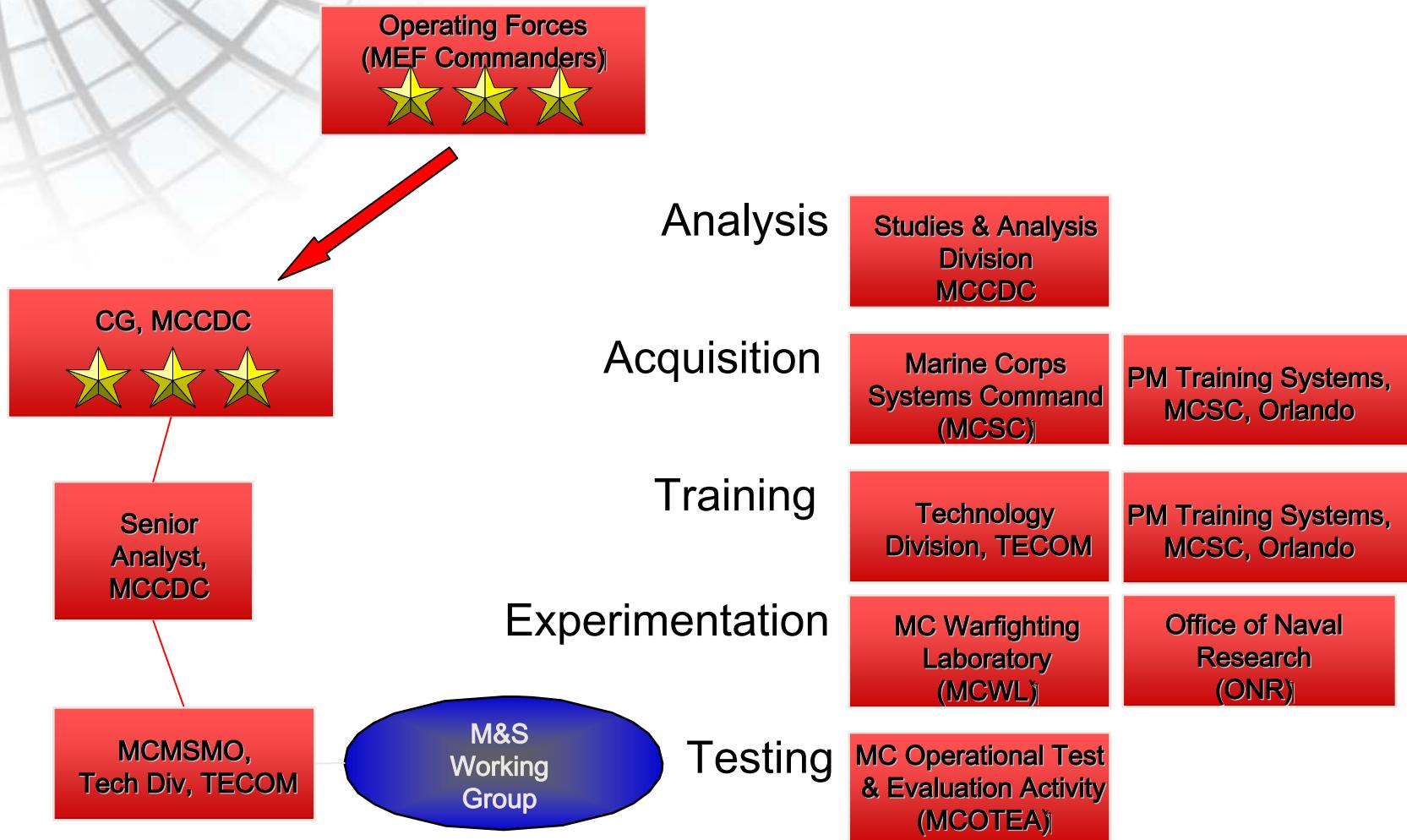
# **TRAINING WITHIN CONSTRAINED RESOURCES**

- The increase in personnel strength does not come with a proportional increase in training resources i.e. ranges and training infrastructure
- Improved capability to train Marines using simulations across the domains of Live, Virtual, and Constructive is the only feasible path to achieve and maintain the readiness of the force

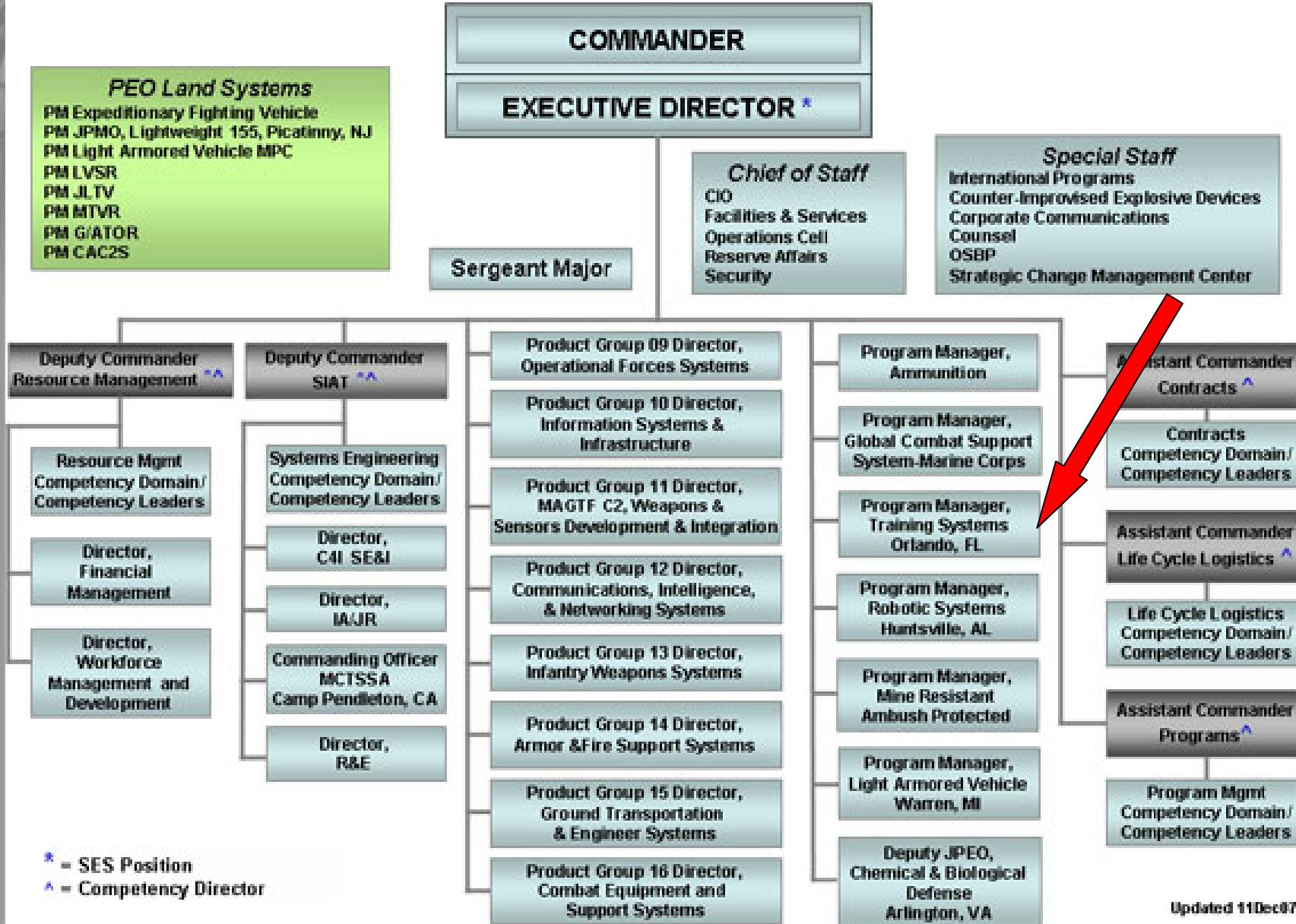
# TRAINING SYSTEMS ACQUISITIONS

- The JCIDS process is the preferred context for deliberate acquisition of materiel solutions
- Unanticipated requirements submitted via Universal Needs Statements (UNS) require adaptability and innovation in acquisitions e.g. the HMMWV egress assistance trainer (HEAT) and MRAP driver and egress trainers

# FROM REQUIREMENTS TO A FIELDDED CAPABILITY



# MARCORSYSCOM ORGANIZATION



# TRAINING SYSTEMS ACQUISITIONS

- TECOM Training Modeling & Simulation Master Plan
  - Signed by Commanding General, Training and Education Command, 18 Jan 2007
  - *“...a supporting document to Marine Corps strategic planning guidance and those documents guiding force capability development. It serves as the initial road map for developing training technology requirements and fully implementing Modeling and Simulation (M&S) in support of the MAGTF Capability List (MCL) and MAGTF Requirement List (MRL).”*
  - *“...This plan serves both the Marine Corps and industry as a source document for current and objective capabilities for virtual and constructive simulation in support of the Marine Corps.”*

# TRAINING M&S MASTER PLAN EXECUTION

- Near-Term. 2008 to 2009
  - Integrate training technologies capabilities development and advocacy processes.
  - Identify training standards and requirements appropriately satisfied by simulation.
  - Complete the USMC LVC-TE Initial Capability Document
- Mid-Term. 2010 to 2014
  - Improve simulation interoperability between bases and stations.
  - Achieve full operating capability for a live, virtual and constructive training environment that is compliant with JNTC requirements.
  - Integrate emerging training simulation technologies with advanced warfighting experiments.
  - Educate leaders in the application of training simulation technologies.
- Far-Term. 2015 to 2017
  - Achieve regular Marine training in a LVC-TE combined with larger JNTC exercises.
  - Achieve full operational capability for a fully netted M&S capability.
  - Embed simulation and simulator capabilities within all fielded operational C2, combat, and combat support systems and sensors capable of integrating with the LVC-TE.
  - Fully acculturate the use of M&S throughout all phases of Total Force training and operations.

# LVC TOOLS

## LIVE

- Integrated GPS Radio System (IGRS)
- Range Instrumentation System (RIS)
- Position Location In (PLI)
- IFF Tracking
- MILES 2000

## VIRTUAL

- Deployable Virtual Training Environment (DVTE)
- Vehicle Simulators (HEAT, MTVR, Incidental Driver)
- Squad Immersive Training Environment (SITE)
- Aircraft Simulators
- Air Crew Simulators
- Air Crew Work Stations

## CONSTRUCTIVE

- Combined Arms C2 Tactical Upgrade System (CACCTUS)
- MAGTF Tactical Warfare Simulation (MTWS)

## Architecture/

### Networks

- Training & Experimentation Network (TEN)
- Joint Training & Experimentation Network (JTEN)
- Training Enabling Architecture (TENA)

- C2PC
- AFATDS

# **S&T LONG POLES IN THE TENT**

- Mission Planning and Rehearsal Rapid Terrain Generation**
- Targets for the LVC TE**
- Urban Structures and Objects for the LVC-TE**
- Human Representation & Interaction with LVC TE**
- Continuously Updated Scenarios**
- Non-kinetic Effects Simulation**

# **VALIDATION OF TRAINING SYSTEMS**

- Training systems must satisfy the three R's
  - Relevant
  - Realistic
  - Rigorous
- It is critical that the operating forces validate the systems we acquire by measuring the effectiveness of the training they facilitate i.e.  
***Did we field the right training system?***

# **Training Management System**

- Comprehensive coordination of training
  - Visibility of the TEEP from MSEs down to the company/detachment level
  - Scheduling and allocation of training resources e.g. operator & SME support, maintenance on ranges and simulators
  - Readiness metrics
- Maximize usage
- Quantify the ROI

# TRASYS Financial Growth

